AMERICAN UNIVERSITY OF BEIRUT

# MAINTAINING EDUCATION DURING EMERGENCIES AND CRISES IN UGANDA

by
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A project
submitted in partial fulfillment of the requirements
for the degree of Master of Arts
to the Department of Education
of the Faculty of Arts and Sciences
at the American University of Beirut

Beirut, Lebanon

August 2025

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Date of project defense: August 19, 2025

# ACKNOWLEDGEMENTS

First and foremost, I give thanks to the Almighty God for the gift of life, strength, and wisdom that has carried me through this academic journey. Without His grace, this work would not have been possible.

I am deeply indebted to my advisor, Dr. Hoda Baytiyeh, for her unwavering support, patience, and constant availability. Her guidance, encouragement, and constructive feedback shaped this research in profound ways, and I am truly blessed to have worked under her mentorship. I also wish to sincerely thank my reader and committee member, Dr. Lina Khalil**,** for her invaluable insights and thoughtful feedback during both my proposal and project defense. Her contributions greatly improved the quality and depth of this study.

My heartfelt gratitude goes to the Mastercard Foundation Scholars Program at AUB, not only for covering all my tuition and academic expenses, but also for going beyond financial support. By providing me with a laptop, a monthly stipend to meet my living and personal needs, and continuous psychosocial, career, and academic advising, the program created an enabling environment for me to focus fully on my studies. I am proud to be part of this life-changing community of scholars.

I owe special thanks to my fiancé, Ssegawa Godfrey, whose emotional support, encouragement, and wise counsel sustained me through the most challenging moments. His love and belief in me gave me the courage to keep moving forward. I am equally grateful to Mr. Katumba Roger Kenneth, a Ugandan researcher, for generously sharing his advice and feedback, which enriched both my academic and personal growth.

Finally, I extend my deepest gratitude to my parents and siblings for being my constant source of strength, love, and encouragement. You have always been my go-to people, cheering me on in moments of doubt and celebrating every small victory with me. Your unwavering support has been the foundation on which I stand today.

# ABSTRACT

# OF THE PROJECT OF

Andinda Tusasire Ruth for Master of Arts
Major: Computing in Education

Title: Maintaining Education During Emergencies and Crises in Uganda

Access to quality education in emergencies remains a challenge for learners in Uganda, particularly those affected by displacement. Despite growing efforts by the Ministry of Education and Sports (MoES), as well as support from international development partners, many children and youth in refugee settlements and disaster-prone regions continue to face serious barriers to learning. This study explores how e-learning can be harnessed to support education access in crisis contexts. The study employs a qualitative research approach through an in-depth review of policy documents, related to emergency education and digital learning in Uganda.

By examining key documents including the Uganda Education Response Plan for Refugees and Host Communities (2018-2021), the National Education in Emergencies Guidelines, and the MoES Digital Agenda Strategy, this research seeks to uncover policy gaps, implementation challenges, and opportunities for strengthening education delivery in emergencies.

Findings indicate that while Uganda has made commendable strides in developing policies for education in emergencies, the integration of e-learning remains uneven and under-resourced. There are promising strategies in place, but they often fall short in reaching the most vulnerable learners. The study concludes by recommending targeted investment in digital infrastructure, stronger policy coordination, and inclusive strategies to ensure no learner is left behind during times of crisis.

This research contributes to ongoing conversations about resilience in education systems and offers a grounded perspective on how policy can better support innovation and equity in emergency learning contexts.

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# ABBREVIATIONS

ADEA Association for the Development of Education in Africa
AEP Accelerated Education Program
APA American Psychological Association
AUB American University of Beirut
AUDA African Union Development Agency
CESA Continental Education Strategy for Africa
COVID Coronavirus Disease
DFID Department for International Development (UK)
EAC East African Community
EDPG Education Development Partners Group
ERP Education Response Plan
GER Gross Enrollment Ratio
ICT Information and Communication Technology
IDPs Internally Displaced Persons
INEE Inter-Agency Network for Education in Emergencies
ITU International Telecommunication Union
KICD Kenya Institute of Curriculum Development
MINEDUC Ministry of Education (Rwanda)
MoES Ministry of Education and Sports (Uganda)
MoICT Ministry of ICT and National Guidance (Uganda)
NDP III Third National Development Plan (2020/21–2024/25)
NEPAD New Partnership for Africa's Development
NPA National Planning Authority (Uganda)
NGOs Non-Governmental Organizations
OECD Organisation for Economic Co-operation and Development
SDG 4 Sustainable Development Goal 4 (Quality Education)
SEN Special Educational Needs
SMS Short Message Service
TV Television
UCC Uganda Communications Commission
UWEZO Regional initiative on literacy/numeracy in East Africa
UN United Nations
UNDRR United Nations Office for Disaster Risk Reduction
UNESCO United Nations Educational, Scientific and Cultural Organization
UNHCR United Nations High Commissioner for Refugees
UNICEF United Nations International Children's Emergency Fund

# CHAPTER I

# INTRODUCTION

## Statement of the Problem

Emergencies such as armed conflict, refugee displacement, pandemics, and natural disasters are increasingly disrupting education systems around the world. In Uganda, the impact is especially visible in refugee-hosting districts and disaster-prone regions, where learning is frequently interrupted and children face difficulties accessing safe, continuous, and quality education (UNHCR, 2022). The Ministry of Education and Sports (MoES), in collaboration with partners, has made significant efforts to develop frameworks and guidelines to support education in emergencies. These include the Education Response Plan for Refugees and Host Communities in Uganda (2018-2021) and the National Strategy for E-Learning, both of which highlight the potential of digital technologies to fill educational gaps during crises (MoES, 2018, 2021).

Despite these commendable efforts, the effective use of e-learning as a response mechanism remains limited in practice. Many learners in emergency settings especially refugees, internally displaced persons, and those living in hard-to-reach areas struggle with barriers such as lack of electricity, internet connectivity, digital devices, and trained educators (World Bank, 2021). Furthermore, while Uganda’s policies acknowledge these challenges, there is a gap between policy intentions and the on-ground implementation. This gap not only affects learners’ access to education but also undermines the national goal of inclusive and equitable learning opportunities for all (MoES, 2021).

The COVID-19 pandemic exposed the fragility of Uganda's education system in emergencies. As schools shut down across the country, the government and development partners rapidly deployed various forms of distance learning, including radio, television, and online platforms. However, the digital divide meant that many vulnerable learners, particularly in rural and refugee-hosting areas, were left behind (Uwezo, 2021). This experience has sparked renewed interest in developing robust e-learning systems that can be sustained and scaled during future emergencies.

What remains unclear, however, is how well Uganda's existing policy documents support this ambition. Are the current guidelines and strategies adequately designed to promote inclusive e-learning in emergencies? Are there structural, institutional, or financial gaps that hinder implementation? These questions point to a pressing need for a deeper analysis of Uganda's policy landscape in the context of emergency education and digital learning.

This study aims to address that need by conducting a comprehensive review of Uganda's education policies, strategies, and frameworks related to emergency response and e-learning. Through this analysis, the study seeks to identify strengths, limitations, and opportunities for improving policy alignment and implementation. In doing so, it contributes to ongoing discussions about building more resilient education systems that can withstand and respond effectively to future crises.

**Rationale of the Study**

Education is widely recognized as a stabilizing force in times of crisis. It provides not only knowledge and skills but also psychosocial support, structure, and hope for the future, particularly for children affected by conflict, displacement, and disaster (INEE, 2020). In Uganda, where the refugee population is among the largest in Africa, and where communities are frequently impacted by floods, landslides, and poverty, the ability to deliver consistent and inclusive education during emergencies is a matter of national concern (UNHCR, 2022).

Recognizing this, the Government of Uganda has made important policy commitments aimed at integrating emergency education into the national system. Documents such as the Education Response Plan for Refugees and Host Communities (2018-2021) and the National Strategy for E-Learning (2021) reflect an intention to use digital platforms to expand access to learning in emergency-prone regions. However, there remains a significant gap in understanding how these policies translate into real-world outcomes, especially for marginalized learners who are most in need of educational continuity during crises (MoES, 2018, 2021).

The COVID-19 pandemic served as a critical stress test for Uganda's education system. As schools across the country were shut down for extended periods, the government introduced remote learning interventions such as radio lessons, TV broadcasts, and online platforms. While these interventions were innovative and well-intentioned, they highlighted longstanding inequalities in access to digital technologies and educational resources. Reports revealed that large numbers of learners especially those in rural and refugee settings were unable to benefit from these solutions due to lack of electricity, internet, devices, or digital literacy (Uwezo, 2021; World Bank, 2021). These experiences underscore the importance of critically examining the policy foundations on which emergency e-learning strategies are built.

This study is particularly timely and relevant because it shifts the focus from individual learners or communities to the national policy environment that shapes education in emergencies. By conducting a detailed review of policy documents, strategies, and frameworks, the research offers insights into how Uganda's policy infrastructure supports or limits to the implementation of inclusive e-learning. This is not only an academic exercise but a practical one, as Uganda continues to work toward achieving Sustainable Development Goal 4 (SDG 4), which calls for inclusive and equitable quality education for all, even in times of crisis (United Nations, 2015).

Moreover, the findings of this study have implications beyond Uganda. Other countries in the region with similar emergency contexts may learn from Uganda's experiences, both successes and challenges in integrating digital learning into their education systems. By highlighting strengths, gaps, and opportunities in existing policy, the study can inform future revisions of emergency education plans, curriculum adaptations, teacher training programs, and investment in digital infrastructure.

Finally, this study contributes to the growing body of literature on education in emergencies by taking a document analysis approach. Whereas many studies focus on field-based data collection, this research leverages Uganda's own policy outputs to understand national priorities, institutional alignment, and implementation readiness. This approach offers a cost-effective and policy-relevant way to assess systemic preparedness and resilience in the face of recurring educational disruptions.

**Research Questions for the Study**

This study examines how Uganda's national education policies support inclusive e-learning during emergencies, highlighting strengths and gaps that affect vulnerable learners' access to continued education. By analyzing policy documents, it assesses the government's preparedness and responsiveness to crises such as pandemics, conflicts, and natural disasters.

The objective of this study is to investigate how do Uganda's national education policies support inclusive e-learning in emergency settings. This objective is supported by the following questions:

1. What policy provisions exist to ensure equitable access to e-learning during emergencies, particularly for marginalized groups such as learners with disabilities, refugees, and those in rural areas?
2. How do national policies address the infrastructure, teacher preparedness, and content delivery mechanisms needed for effective emergency e-learning?
3. How do Uganda's education policies align with international guidelines and frameworks on education in emergencies and inclusive digital learning (INEE Minimum Standards, SDG 4)?
4. What gaps or inconsistencies exist in the current policy framework that may hinder the successful implementation of inclusive e-learning during emergencies?

This study analyzes Uganda's education policies to assess their support for inclusive e-learning during emergencies, focusing on how effectively they ensure continuity of learning for vulnerable learners.

**Significance of the Study for Practice and Policy**

Uganda, like many other countries in Sub-Saharan Africa, was unprepared for the massive disruptions to formal education caused by the COVID-19 pandemic. When schools shut down in early 2020, millions of learners, especially those in rural areas, refugee settlements, and marginalized communities were left behind. While emergency interventions such as radio lessons, television programs, and online platforms were introduced, access remained uneven and largely inaccessible to many students due to infrastructural and socioeconomic challenges. This study is significant because it places a spotlight on the role that national policy plays in shaping how inclusive and effective such emergency education responses can be.

Supporting Evidence-Based Policy Reforms***:*** First and foremost, this research seeks to inform education policy reform in Uganda. Through a detailed review of the existing national policy documents related to e-learning and emergency education, this study identifies the extent to which these documents address inclusivity and accessibility. More importantly, it highlights policy blind spots areas where intentions may not translate into practical outcomes for marginalized learners.

For instance, learners with disabilities often require specialized assistive technologies, differentiated instruction, and teacher training that are rarely addressed in broad emergency education frameworks. Similarly, refugee learners face both logistical and legal barriers that are seldom considered in national strategies. By surfacing these gaps, the study offers policymakers evidence-based insights that can guide the revision and improvement of policy documents to better serve all learners not just those with stable internet connections or urban addresses.

In the post-pandemic recovery period, there is a renewed opportunity to rethink and reimagine education delivery systems. The results of this study can therefore contribute to building a more resilient and inclusive education system that not only responds to future emergencies but also works better under normal conditions.

Advancing the Global Commitment to SDG 4: The study also has significance at the international level. Uganda is a signatory to the Sustainable Development Goals (SDGs), particularly SDG 4, which aims to "ensure inclusive and equitable quality education and promote lifelong learning opportunities for all" (United Nations, 2015). Achieving SDG 4 means ensuring that every child regardless of their physical abilities, economic background, or geographical location has access to learning opportunities, even in times of crisis.

However, without strong national policies that operationalize these global commitments, SDG 4 risks becoming little more than a well-meaning slogan. This research contributes to ongoing efforts to localize SDG targets and assess progress through the lens of national policy readiness. By evaluating how well Uganda's policies align with SDG 4 and related frameworks such as the INEE Minimum Standards, the study offers a grounded and practical assessment of the country's preparedness to uphold its international commitments.

Centering Marginalized Voices in Education Planning: Perhaps most importantly, this study contributes to making education planning in Uganda more inclusive by centering the needs of learners who are often left out of mainstream policies. Emergencies tend to exacerbate existing inequalities. Without deliberate inclusion strategies, learners with disabilities, girls, refugees, and those living in rural or low-income households are disproportionately affected. Inclusive policy frameworks are therefore not a luxury; they are a necessity.

By examining whether current education policies explicitly mention these groups and outline mechanisms for ensuring their participation, the study becomes a tool for advocacy. It can empower civil society organizations, parent associations, and other stakeholders to push for more equitable solutions. When policymakers are presented with evidence showing exactly where and how marginalized learners are excluded from emergency e-learning plans, they are better positioned to take corrective action.

Strengthening National Resilience and Future Readiness: Lastly, the study has forward-looking significance. As climate change intensifies and global health threats remain a possibility, Uganda will likely face more emergencies that disrupt schooling. The extent to which the country can maintain educational continuity in the face of such crises depends on how well it prepares today. Policy documents are not just texts; they are blueprints for action. If they are not inclusive, adaptive, and responsive, then education systems will continue to falter under pressure.

This study, therefore, acts as a mirror to the education sector reflecting its current capacity, its gaps, and its potential. In doing so, it contributes to building a national education system that is not only inclusive by design but also resilient by default.

# CHAPTER II

# LITERATURE REVIEW

**Global Perspectives on E-Learning in Emergency Contexts**

The global shift toward e-learning, particularly during emergency situations, has been both rapid and transformational. While digital education had long been evolving as a supplemental learning method, emergency scenarios particularly the COVID-19 pandemic propelled it to the forefront as the primary mode of instructional delivery across much of the world. This sudden shift placed unprecedented pressure on education systems globally, revealing their strengths, weaknesses, and disparities in preparedness. Governments, educational institutions, and stakeholders were compelled to embrace digital platforms overnight, often with limited resources, experience, or supporting infrastructure (Bozkurt et al., 2020).

Evolution of E-Learning in Emergency Contexts: Historically, e-learning was utilized mostly in higher education or as an enhancement to traditional classroom settings. In developed nations, learning management systems (LMSs), virtual classrooms, and multimedia resources were routinely integrated into curricula. However, the concept of online learning in emergency contexts where digital platforms become the sole means of continuity was less explored or implemented, particularly in low- and middle-income countries.

The onset of the COVID-19 pandemic marked a pivotal turning point. With nearly 1.6 billion learners affected by school closures at its peak in 2020 (UNESCO, 2020), the crisis underscored the vulnerability of traditional, in-person learning models. It also highlighted a paradigm shift, digital education could no longer be treated as optional or supplementary. Instead, it became a critical component of educational resilience and continuity during crises. Scholars such as Hodges et al. (2020) differentiated between well-planned online learning and what they termed “emergency remote teaching” temporary solutions deployed rapidly and often without sufficient pedagogical planning.

Policy Frameworks Governing E-Learning: The role of national and global policies in shaping digital education during emergencies cannot be overstated. Organizations such as UNESCO, OECD, and the World Bank responded swiftly to the pandemic with frameworks and guidance to support countries in transitioning to online and blended learning. UNESCO (2020), for example, launched the COVID-19 Global Education Coalition to support national governments in scaling remote learning. The coalition provided resources, facilitated public-private partnerships, and encouraged the adoption of inclusive learning tools.

In parallel, the OECD (2021) emphasized key pillars for successful digital learning integration, national vision and leadership, digital skills development, infrastructure investment, and inter-ministerial coordination. Countries with pre-existing policies that incorporated these elements such as Estonia, Singapore, and Finland managed smoother transitions to remote learning, with minimal disruption to learners. These examples illustrated the power of foresight and the value of embedding digital readiness into national education strategies.

Yet, even with the availability of global guidelines, policy gaps remain evident, particularly in low- and middle-income countries. A World Bank (2021) study revealed that more than half of these countries lack defined national policies on online education during emergencies. Where policies do exist, they are often underfunded, narrowly focused, or reliant on temporary donor support. This has hampered the scalability and sustainability of digital learning during extended emergencies.

Equity and Accessibility Concerns: A major global concern surrounding emergency e-learning is the issue of equity. While the shift to digital platforms was swift, it was far from uniform. The digital divide defined by differences in access to devices, internet connectivity, and digital literacy became starkly visible. According to a joint report by UNICEF and ITU (2020), approximately two-thirds of the world's school-aged children (1.3 billion) do not have internet access at home, making participation in online education impossible for many.

This divide is not just digital, it is gendered, geographic, and economic. Girls in conservative societies, children in conflict zones, and learners with disabilities were disproportionately affected. In many settings, even when technology was available, it was primarily controlled by adults or older siblings, further limiting children's direct access to learning resources (UNESCO, 2020).

Institutional Adaptation and Pedagogical Shifts: Another dimension of the global response to emergency e-learning involves institutional adaptation and pedagogical innovation. Schools and universities were forced to rapidly convert their teaching materials to digital formats, often without adequate time or training. This process revealed the difference between reactive and proactive approaches to online education. Hodges et al. (2020) cautioned against equating emergency remote teaching with traditional online learning, pointing out that the former typically lacks the thoughtful design, structure, and student support systems characteristic of the latter.

Nevertheless, many institutions demonstrated remarkable agility. Teachers began experimenting with video conferencing tools, asynchronous learning modules, and mobile-based learning apps. In some countries, such as Brazil and India, large-scale government portals were created to deliver content in multiple languages and formats. These experiences contributed to a growing recognition of the need to institutionalize digital pedagogy in teacher training programs, not only as a crisis response but as a core teaching competency.

Global Best Practices and Policy Innovations: Amid the challenges, several countries have emerged as exemplars of resilience in digital education. Estonia, often lauded as a digital society, had long invested in e-school systems and teacher training. As a result, it transitioned smoothly to online learning, with minimal disruption. The Finnish education system, known for its learner-centered approach, was equally well-positioned, with teachers empowered to adapt curricula to digital environments (OECD, 2021).

The Global Education Coalition by UNESCO also played a key role in coordinating efforts across sectors. Bringing together tech companies, governments, and NGOs, it facilitated access to digital learning platforms, supported teacher training, and promoted the development of inclusive educational content. Initiatives like these reflect a growing trend toward multilateral collaboration in crisis education responses.

Another noteworthy global practice is the integration of offline e-learning solutions for low-connectivity areas. Tools such as Kolibri (by Learning Equality) and Rumie have been deployed in refugee camps and rural areas to deliver interactive content without needing constant internet access. These innovations are helping to redefine what digital education can look like in contexts where traditional broadband is unrealistic.

**E-Learning in Sub-Saharan Africa: Opportunities and Challenges**

E-learning in Sub-Saharan Africa has developed within a context marked by deep structural inequalities, limited digital infrastructure, and underdeveloped policy ecosystems. Despite a growing global interest in the use of digital tools to support education, systemic barriers continue to hinder the effective and equitable implementation of e-learning across much of the region, particularly during emergencies such as pandemics, natural disasters, or armed conflicts.

A defining challenge across Sub-Saharan Africa is the persistent digital divide. Fewer than 30% of households in the region have access to the internet, and only about 10% of students live in homes with a suitable computer or tablet for e-learning (ITU, 2021; World Bank, 2021). In rural areas where a majority of the population resides, these figures are even lower. Many communities lack electricity, let alone broadband infrastructure. Where mobile internet exists, high data costs and low bandwidth often make online education unaffordable or unusable for most learners. This situation became especially dire during the COVID-19 pandemic, when most countries were forced to close schools and shift to remote modalities. Many governments responded by broadcasting lessons on radio and television, or distributing printed self-study materials. While these strategies extended some form of educational continuity, they lacked interactivity, assessment mechanisms, and support for learners with special needs (Mulenga & Marbán, 2020).

Beyond access, policy and institutional readiness also remain critical issues. While countries like South Africa, Kenya, and Rwanda have national ICT strategies that include educational technology components, most governments have yet to develop comprehensive e-learning policies designed for emergency response. A report by the

Association for the Development of Education in Africa (ADEA, 2020) highlighted that fewer than 40% of Sub-Saharan countries had any dedicated digital learning policy by the time the pandemic hit. Where policies did exist, they often lacked clear implementation frameworks, stable funding, and accountability mechanisms. As a result, emergency e-learning programs were largely reactive, fragmented, and heavily reliant on donor support or public-private partnerships.

Nonetheless, there have been examples of proactive policy and innovation in countries like Kenya and Rwanda. Kenya's Ministry of Education, through the Kenya Education Cloud, expanded access to digital curriculum materials during the pandemic. Private initiatives like Eneza Education and partnerships with mobile providers helped deliver SMS-based educational content to learners without smartphones or internet access. Rwanda, under its Smart Rwanda Master Plan, had already invested in infrastructure and teacher training before COVID-19, which enabled the rapid deployment of its national e-learning platform. However, such efforts have not always achieved equitable outcomes. For example, in Kenya, most digital learning services disproportionately benefited urban and private school students, further widening educational inequality.

In contrast, countries like Tanzania and Ethiopia took more traditional or cautious approaches. Tanzania prioritized radio and television programming and reopened schools earlier than most of its neighbors. Ethiopia, despite having an ICT policy in education, struggled with poor broadband coverage and low digital literacy among teachers. Similar challenges were seen in Malawi and Zambia, where emergency learning responses were centered around printed home study materials and limited radio coverage. These approaches reflected an important sense of pragmatism but also underscored the absence of long-term digital education strategies that could withstand future emergencies.

Teacher preparedness is another major constraint. Even in relatively advanced contexts, teachers were often ill-equipped to deliver online instruction during school closures. In South Africa, for instance, teachers were expected to adopt platforms like Google Classroom and MS Teams with minimal training or support. Professional development in digital pedagogy remains underfunded across the region. A UNESCO survey (2021) noted that less than 30% of teachers in Sub-Saharan Africa had received any form of training related to e-learning prior to the pandemic.

Equity concerns also feature prominently in regional discourse. Children from marginalized backgrounds including girls, children with disabilities, and those in remote areas were among the least likely to benefit from emergency e-learning programs. Many digital platforms are not optimized for low-spec devices or do not include local language support, making them inaccessible to large segments of the population. Furthermore, some governments and institutions have failed to include inclusive design and accessibility requirements in their procurement or content development processes.

Sustainability of digital education programs is also a critical issue. Many successful initiatives launched during the pandemic were funded through short-term grants or international aid. These included pilot programs that provided solar-powered tablets to rural schools or connected refugee learners via satellite internet. However, without integration into national budgets or public education systems, these initiatives often lacked mechanisms for maintenance, teacher training, content updating, and scale-up. This risk frames e-learning as a temporary or emergency measure rather than a core part of the education system.

That said, innovation is not lacking. Local EdTech startups and NGOs have developed a range of adaptive solutions for low-resource environments. For example, the Kolibri platform offers offline learning via local servers that don't require internet access. Shupavu291 in Tanzania uses basic SMS for quiz-based learning, supporting students without smartphones. M-Shule in Kenya integrates AI-driven personalized learning via SMS. These models demonstrate the potential for scalable, context-appropriate digital learning tools in Sub-Saharan Africa.

Another positive trend is the growing momentum for regional cooperation. Under the African Union's Continental Education Strategy for Africa (CESA), member states are encouraged to develop harmonized policies for digital education, support cross-border teacher training, and invest in regional digital infrastructure. The East African Community (EAC) has also begun discussions on standardizing digital learning systems, including shared repositories for open educational resources and teacher development programs. While these efforts are still in early stages, they represent critical steps toward coordinated, scalable solutions.

Despite systemic challenges, the pandemic has catalyzed an important shift in mindset across the region. Policymakers, educators, and learners have seen the potential of digital learning not just as a stopgap during emergencies but as a powerful tool for expanding access, improving equity, and building resilience. Moving forward, countries will need to rethink their education budgets, invest in connectivity, build local capacity, and develop robust policy ecosystems that support inclusive, sustainable e-learning for all.

This will not only prepare the region for future crises but also contribute to long-term educational transformation, one that prioritizes access, equity, and quality in a digital age. The experience of Sub-Saharan Africa demonstrates that innovation is possible even in the most resource-constrained environments. However, turning innovation into systemic change will require strong political will, regional collaboration, and long-term investment in digital infrastructure, teacher training, content localization, and inclusive education strategies.

**Education During Emergencies in Uganda**

Uganda's efforts to integrate e-learning into its education system during emergencies have been shaped by both persistent structural challenges and growing policy commitments. National documents such as the Education Response Plan for Refugees and Host Communities (2018-2021), the National Strategy for E-Learning (2021), and the COVID-19 Education Response Plan (2020) all reflect an intention to use digital tools to ensure continuity of learning. However, these strategies have faced implementation hurdles, especially in regions affected by displacement and natural disasters. The following case studies illustrate how Uganda's education policy frameworks have responded to different emergency scenarios.

***Case Studies of E-learning in Emergency contexts in Uganda***

- Floods in Kasese District: Kasese is one of Uganda's most flood-prone districts, frequently affected by the overflow of rivers Nyamwamba and Mubuku. According to the COVID-19 Education Response Plan (MoES, 2020), floods in the area repeatedly displaced communities and led to extended school closures. Temporary learning centers were established in emergency shelters, but these facilities often lacked basic teaching and learning materials, electricity, and access to digital tools. While the National Strategy for E-Learning highlights the need for scalable and adaptive learning platforms, no concrete implementation plan was tailored to address the recurring natural disasters in districts like Kasese.

The Education in Emergencies (EiE) guidelines mention the use of radio-based instruction in flood-affected areas. However, many learners lacked access to radios or safe listening spaces. The lack of contingency planning for digital access in such areas illustrates the gap between policy ambition and infrastructural reality.

- Landslides in Bududa: Bududa district in Eastern Uganda is a high-risk area for landslides, which have repeatedly destroyed homes and schools. Policy responses to education disruptions in Bududa have been reactive and inconsistent. The National Development Plan III and the Education Sector Strategic Plan recognize the need for emergency education continuity, yet specific digital responses to disasters in high-risk zones like Bududa are not well articulated.

Temporary learning centers are occasionally deployed, but according to UNHCR and Red Cross documentation, these are often devoid of ICT resources or trained teachers. Although the National E-Learning Strategy promotes mobile and solar-powered devices, there is limited evidence that such interventions have reached landslide-prone regions. This case underscores the need for a decentralized, localized implementation model embedded within national policies.

- Refugee Settlements - Bidibidi and Kyangwali: Uganda hosts more than 1.6 million refugees, with large populations concentrated in settlements such as Bidibidi (Yumbe district) and Kyangwali (Kikuube district). The Education Response Plan for Refugees and Host Communities (2018-2021) is one of the most comprehensive policy documents addressing educational continuity in emergencies. It identifies digital learning as a key strategy and includes pilot initiatives such as the deployment of solar-powered tablets and use of Kolibri, an offline e-learning platform.

However, these projects remain donor-dependent and limited in scale. For instance, the policy does not specify how the Ministry of Education and Sports will sustain such digital interventions after external funding ends. Additionally, the strategy lacks a long-term plan for integrating refugee education into the broader national ICT infrastructure. Although the UNHCR Uganda Refugee Education Strategy (2019) complements national efforts, coordination gaps between agencies hinder effective policy execution.

- COVID-19 Pandemic and Nationwide School Closures: The COVID-19 pandemic forced nationwide school closures for nearly two years, exposing the fragility of Uganda's education system. In response, the Ministry of Education implemented a multi-modal learning strategy comprising radio and television broadcasts, home study packages, and online learning platforms such as Kolibri and Moodle (MoES, 2020).

The National Strategy for E-Learning (2021) outlined a vision for scaling digital education using both high-tech (online platforms) and low-tech (offline digital content) methods. However, data from Uwezo (2021) and World Bank (2021) showed that access remained deeply unequal. Only 22% of households had internet connectivity, and fewer than 14% of rural homes had electricity. Despite provisions in policy documents advocating for inclusive education, there was no comprehensive implementation plan for reaching digitally excluded learners in remote or displaced communities.

***Challenges of E-Learning in Emergency Contexts in Sub-Saharan Africa.***

- Digital inequality remains a dominant barrier, with limited access to electricity, internet connectivity, and devices particularly in rural areas hindering the effectiveness of remote learning interventions.
- Policy development has not kept pace with technological advancements or the growing need for emergency education planning. Many countries entered recent crises, such as COVID-19, without comprehensive e-learning strategies.
- Teacher preparedness and digital training are significantly underfunded and unevenly implemented. Educators often lack the capacity to deliver effective instruction via digital platforms during emergencies.
- Emergency education responses have often been fragmented and heavily reliant on donor funding or short-term pilot projects, raising concerns about long-term sustainability and national ownership.
- Equity challenges persist, especially for vulnerable learners such as girls, children with disabilities, and displaced populations, who are frequently left out of digital education strategies.
- Innovative practices such as offline content platforms, mobile-first solutions, and public-private partnerships have emerged as promising but underutilized approaches to expanding access in low-resource settings.

These regional dynamics provide an important backdrop for assessing Uganda’s education policy framework. They offer comparative insights that help highlight where Uganda's strategies align with or diverge from broader trends in e-learning and emergency education.

**Conceptual Background/Framework**

The concept of inclusive education has evolved from a focus on learners with disabilities to a broader framework that encompasses all individuals who face barriers to education be they physical, economic, geographic, linguistic, social, or political. For the purposes of this study, inclusive education is approached through a lens that foregrounds refugees in permanent settlements, internally displaced learners and teachers in temporary camps, and rural populations in hard-to-reach areas who are often marginalized in times of crisis. Emergencies such as natural disasters (e.g., landslides in Bududa, floods in Kasese) and pandemics (e.g., COVID-19) have exacerbated these inequalities, threatening the continuity of education for millions. This study uses the concept of inclusive education to assess how national policies in Uganda have responded to these conditions specifically through the lens of digital and e-learning interventions during emergencies.

In line with Sustainable Development Goal 4 (SDG 4), which aims to ensure inclusive and equitable quality education for all, inclusive education, as defined by UNESCO (2009), is "a process of addressing and responding to the diversity of needs of all learners through increasing participation in learning, cultures, and communities, and reducing exclusion within and from education." This approach requires education systems to identify and remove barriers that hinder participation and learning. In crisis-affected contexts, these barriers are compounded and made more visible. Refugee students may lack identification documents, rural learners may have no access to devices or electricity, and internally displaced families may live in transient shelters where education is not prioritized. In these cases, the concept of inclusion becomes central to building resilience within the education system.

In Uganda, the concept of inclusive education has been institutionalized in various policies, including the Special Needs and Inclusive Education Policy (MoES, 2011), the Education Response Plan for Refugees and Host Communities (2018-2021), and the National Strategy for E-Learning (2020). Each of these policy instruments reflects a commitment to equity and inclusion, although with varying levels of depth and implementation. For instance, the Education Response Plan for Refugees includes objectives around equitable access to education for both refugee and host community children. However, it does not fully articulate how this inclusion will be maintained during national emergencies or prolonged school closures.

***Key dimensions that frame the conceptual understanding of inclusion in this study***

- Equity: Equity is not the same as equality. While equality suggests giving every learner the same resources, equity recognizes that learners come from different starting points and therefore need different levels of support to achieve similar outcomes. In the context of education in emergencies, equity entails ensuring that a rural child learning under a tree in Kasese has the same opportunity to access educational content as a child in Kampala using an online portal. Policy must account for these disparities through differentiated resource allocation, targeted interventions (e.g., solar-powered devices), and affirmative inclusion of hard-to-reach populations.
- Access and Availability: Access is about more than just physical presence in a classroom or digital platform. It includes the availability of learning materials, trained teachers, connectivity, devices, and a safe and enabling learning environment. For e-learning to be truly inclusive, infrastructure must be extended to underserved communities. This includes expanding broadband coverage,

offering low-data-use platforms, and integrating offline learning content where internet access is not feasible. During COVID-19, the Ugandan government attempted to bridge the gap through radio and television programming, but the effectiveness of these interventions was mixed due to inconsistent power access, lack of interactivity, and regional disparities (MoES, 2020).

- Participation and Engagement: True inclusion goes beyond mere access to include participation to ensure that learners are not only present but also actively engaged in their learning processes. This includes interactivity, opportunities for feedback, and content that is relevant and culturally contextualized. Refugee learners, for instance, may be proficient in different languages or have had gaps in their educational trajectories. Policies must address these contextual realities by supporting adaptive curricula and training teachers to recognize and respond to diversity in the classroom and virtual settings.
- Continuity and Resilience: A central element of this study's conceptual framework is the idea of continuity. Inclusive education must be sustained even during disruptions. This requires resilience, the capacity of the education system to absorb shock, adapt, and continue functioning. In Uganda, the education sector's response to the COVID-19 pandemic exposed significant gaps in resilience. While some universities managed to transition to e-learning platforms, primary and secondary schools especially in rural and emergency-prone regions lacked the capacity to do so. Therefore, inclusive education policy in Uganda must be conceptualized as a crisis-responsive system, embedded with flexible and scalable solutions that can be activated when traditional delivery modes are compromised.

- Contextual Relevance: Policies must be grounded in the socio-cultural, economic, and geographic realities of the populations they intend to serve. For example, while mobile learning may seem like a viable solution for digital education, the availability of smartphones and stable power supply is still limited in many parts of Uganda. Therefore, any conceptualization of inclusion must align with what is realistically possible in the community. The use of solar-powered routers, offline learning servers like Kolibri, or community learning hubs offers context-relevant solutions that need to be institutionalized in national policy documents.
- Cross-sectoral Coordination: Inclusion in education is not the sole responsibility of the Ministry of Education. It also involves coordination with ICT ministries, energy providers, local governments, and civil society. For instance, extending broadband access to rural schools requires collaboration between the education and ICT sectors. Similarly, device procurement for displaced learners necessitates input from humanitarian organizations. Inclusive education policies must thus be conceived as intersectoral strategies that facilitate collaboration, shared accountability, and efficient resource use.
- Sustainability: Finally, inclusive education cannot be donor-dependent. Many digital education interventions in Uganda during COVID-19 were piloted by NGOs and international development partners. While these programs provided immediate relief, they were often not integrated into national frameworks and lacked plans for sustainability. A long-term inclusive education model requires integration into public budgets, national teacher training curricula, and infrastructure development plans. Otherwise, inclusion remains aspirational and cannot withstand future crises.

This conceptual framework sets the stage for a policy document review that goes beyond rhetoric and examines how Uganda's national education strategies internalize these dimensions. Are learners in underserved regions being systematically planned for? Are emergency education policies reflecting local needs and realities? Is digital education seen as a permanent feature of the education system or just a stop-gap solution? These are the guiding questions that will be explored in the chapters that follow.

**Summary**

This chapter presented a comprehensive review of the literature on inclusive education, paying particular attention to the experiences of underserved communities in emergency contexts. At the global level, foundational frameworks such as the Universal Declaration of Human Rights, the Salamanca Statement, and the Sustainable Development Goals underscore the right to inclusive and equitable education, with a strong focus on addressing the needs of the most marginalized, those excluded due to poverty, displacement, remoteness, or crisis situations.

Regionally, the review highlighted how countries across Sub-Saharan and East Africa have responded to emergencies through varied e-learning strategies, policy reforms, and donor-supported interventions. While some nations have made notable strides in policy articulation and digital learning innovation, persistent barriers such as poor infrastructure, lack of internet access, limited teacher training, and underfunded implementation efforts continue to marginalize learners in rural and displaced settings.

Uganda's policy environment reflects growing awareness of inclusive education and the role of e-learning in times of crisis. Policies like the Special Needs and Inclusive Education Policy, the Education Response Plan for Refugees and Host

Communities, and the National Strategy for E-Learning show the government's intent to reach vulnerable learners. However, the literature also reveals a gap between policy promises and practical outcomes, particularly for refugee learners, internally displaced persons in temporary settlements, and rural communities with little or no access to digital infrastructure.

This chapter also introduced the conceptual framework underpinning the study. Inclusive education is understood here as a multifaceted process aimed at eliminating systemic barriers to participation and learning, especially for those living in underserved or crisis-affected contexts. The review emphasizes that achieving equity in emergencies demands not just physical access but also relevance, continuity, and sustainability in education delivery.

In summary, this chapter sets the foundation for analyzing how Uganda’s policy documents address the education needs of underserved populations in emergency contexts. It provides the conceptual tools and empirical backdrop needed to evaluate the inclusivity, coherence, and responsiveness of national education policy in times of crisis.

# CHAPTER III

# METHODOLOGY

**Research Design**

This study adopted a qualitative research design, guided by policy document analysis, to examine the extent to which Uganda's education policy environment supports the continuity of learning during emergencies and crises. This research is a policy research study that reviews existing policy documents and strategic frameworks. It investigates how education continuity is addressed within national policies, particularly through the lens of e-learning and digital preparedness, and how these strategies apply to vulnerable learner groups such as refugees, internally displaced persons (IDPs), and rural populations. This approach allowed the study to extract meaning, uncover gaps, and interpret the alignment between policy intent and practical readiness for emergency education delivery.

Qualitative research is appropriate for this study because it offers the flexibility to interpret text-based content and generate insights grounded in context. According to Bowen (2009), document analysis is a valid qualitative method that involves evaluating printed and digital materials to extract meaningful information. In this case, document analysis provides the opportunity to review national education and ICT policies, strategic implementation plans, and emergency response frameworks. Given that the study examines past and present policy trends, a document-based design is ideal for understanding how Uganda has planned, communicated, and responded to educational disruptions over time.

The research took an interpretivist stance, which assumes that policy documents are not just technical instruments but social constructs that reflect particular values, assumptions, and intentions. Education policy does not exist in a vacuum; it is shaped by political, economic, and social forces, including the influence of donors, international frameworks (such as Sustainable Development Goal 4), and Uganda's own development agenda. This philosophical grounding allows the study to go beyond surface-level policy analysis and critically examine how education continuity is framed in emergency settings.

This approach was also justified by the nature of the study population. Learners affected by crises in Uganda especially those in refugee settlements or temporary shelters after disasters are often dispersed, hard to reach, and subject to ongoing instability. These conditions make primary data collection logistically complex and ethically sensitive. Moreover, Uganda has already developed a range of education-in-emergencies (EiE) policy documents and digital learning strategies that provide a rich basis for analysis. By focusing on these documents, the research captures the policy-level commitments and gaps without imposing additional burden on already vulnerable populations.

The document analysis will be guided by the study's research questions. The analysis focuses on the presence, strength, and implementation clarity of provisions that promote digital learning during emergencies. Attention will also be paid to whether these policies are inclusive of displaced learners, whether they make provisions for internet infrastructure, and how they propose training and equipping educators in emergency settings.

Additionally, this study employed a conceptually guided thematic analysis, grounded in the principles of Social Constructivism and the Capabilities Approach. These frameworks support the idea that learning is shaped by one's environment and that policy should aim to expand people's actual freedoms and opportunities, in this case, the freedom to learn even in the face of crisis. The Capabilities Approach, originally developed by Amartya Sen and Martha Nussbaum, provides a useful lens for evaluating whether Uganda's policies empower learners to realize their educational rights, regardless of circumstance.

In summary, this research design leverages the strengths of qualitative inquiry to explore how policy can either enable or constrain access to learning in fragile contexts. It is particularly relevant for studies in low- and middle-income countries like Uganda, where education systems are highly exposed to emergencies and where policy remains the most visible tool for guiding systemic change. Through a rigorous and reflective analysis of Uganda's education and digital policy documents, the study seeks to provide practical insights for improving educational resilience and promoting inclusive, technology-enabled learning solutions in emergency contexts.

**Context of the Study**

Uganda has long been recognized as a host country for both sudden and protracted humanitarian crises, including natural disasters, pandemics, and the displacement of populations due to both internal and regional conflicts. As a low-income country with a fast-growing youth population and significant regional disparities in infrastructure and access to services, the Ugandan education system operates under persistent strain. These pressures are significantly magnified in times of national or local crises, which routinely disrupt schooling and limit the government's ability to ensure learning continuity.

One of the most defining features of Uganda's emergency education landscape is its role as the largest refugee-hosting country in Africa. As of May 2024, Uganda hosted more than 1.6 million refugees and asylum seekers, primarily from South Sudan and the Democratic Republic of the Congo (UNHCR, 2024). Refugee settlements such as Bidibidi, Kyaka II, Kyangwali, and Nakivale are now home to tens of thousands of school-aged children. While Uganda's inclusive refugee policy allows refugee children to access public education, the education system in host communities is overstretched, under-resourced, and often ill-prepared to handle the sudden surges in learner populations during emergencies. This is compounded by challenges such as language differences, limited access to teaching materials, and lack of infrastructure for digital learning.

In addition to conflict-related displacement, Uganda is highly vulnerable to natural disasters, particularly floods and landslides, which have consistently displaced thousands and disrupted education in recent years. For example, Kasese District in western Uganda regularly experiences flooding due to the overflow of rivers Nyamwamba and Mubuku. During such events, schools are either destroyed or converted into emergency shelters, forcing prolonged interruptions to learning. Similarly, the Bududa region in Eastern Uganda is known for deadly landslides that have not only claimed lives but also rendered school facilities unusable for extended periods. In both contexts, learners are often relocated to temporary settlements where education becomes a secondary concern.

The COVID-19 pandemic presented a national-level education crisis, affecting over 15 million learners across the country (MoES, 2021). Schools remained closed for nearly two years, the longest school closure period in Africa, leading to significant learning loss, increased dropout rates, and growing inequalities between urban and rural learners. In response, the government introduced distance learning through radio, television, and online platforms. However, access to these platforms was severely limited in rural and refugee-hosting districts due to lack of electricity, internet connectivity, and devices (Nakabugo et al., 2022; World Bank, 2021). This experience revealed the fragility of the country's education system in times of crisis and emphasized the need for scalable, technology-supported learning solutions that could operate across diverse geographies and learner profiles.

Given this complex landscape, the context of this study was grounded in the intersection of education, displacement, disaster response, and digital transformation. It is also shaped by Uganda's commitment to global frameworks such as Sustainable Development Goal 4 (inclusive and equitable quality education for all) and the Sendai Framework for Disaster Risk Reduction, both of which underscore the importance of resilient education systems. Uganda has developed several policy frameworks addressing education in emergencies and e-learning, such as the Education Response Plan for Refugees and Host Communities (2018-2021) and the National Strategy for E-Learning (2021). However, gaps in implementation, resource allocation, and cross-sectoral coordination remain.

This study, therefore, took place within a policy environment that has acknowledged the importance of education continuity but is still in the process of fully operationalizing these commitments. By reviewing existing policy documents through a qualitative lens, the study sought to understand the extent to which Uganda's education strategies are truly prepared to sustain learning for rural learners, refugee students, and displaced persons during future emergencies, with a particular emphasis on the role of e-learning technologies and connectivity

**Policy Document Review Procedures and Analysis**

This study was rooted in the qualitative review and analysis of national policy documents to assess how the Ugandan education system frames and operationalizes continuity of learning during emergencies, especially through e-learning. The research departs from traditional primary data collection and instead applies a rigorous document analysis methodology to evaluate policy preparedness, responsiveness, and gaps related to education resilience. The study particularly considers underserved populations such as learners in rural communities, refugees in permanent settlements, and internally displaced persons in temporary shelters caused by disasters such as floods and landslides.

The policy documents analyzed (See Appendix A) were authored by the Ministry of Education and Sports (MoES), the Ministry of ICT and National Guidance, the National Planning Authority, and development partners like UNICEF, UNHCR, and the World Bank. The study focuses on materials published between 2011 and 2024, encompassing the post-conflict and digital transformation periods in Uganda. This timeframe was selected to capture the evolution of Uganda's emergency education and digital learning strategies, with special emphasis on responses to the COVID-19 pandemic and disaster-induced displacement.

Document Selection Criteria and Search Strategy: To ensure relevance, a clear set of inclusion and exclusion criteria was established (See Appendix B). Documents were selected if they:

- Were officially endorsed or published by a government agency or development partner.
- Had national coverage or addressed vulnerable learners (e.g., refugees, rural learners, displaced populations).
- Specifically mentioned e-learning, emergency response, digital infrastructure, or inclusive education.
- Were published between 2011 and 2024.
- Were publicly accessible through government portals, international repositories, or education sector working groups.

Exclusion criteria were applied to documents that:

- Focused solely on technical ICT matters without reference to education.
- Were outdated or had been superseded by more recent versions.
- Lacked credible authorship or were informal working drafts.

Searches were conducted through institutional websites (e.g., MoES, NPA, UCC), educational repositories (Planipolis, AUDA-NEPAD), and international databases maintained by UNESCO and UNICEF. Additional documents were identified through citation tracking and consultations with Uganda's Education Development Partners Group (EDPG).

Document Review Log and Management: To manage the review process, a Document Review Log was created using Excel (See Appendix C). Each document entry included:

- Title and authoring institution
- Year of publication
- Scope (national or sector-specific)
- Relevance category (e.g., ICT in education, emergency response)
- Summary of key provisions
- Codes assigned during analysis (e.g., teacher preparedness, access, inclusion)

This tool enabled a transparent and organized tracking system and allowed for cross-document comparison.

Thematic Analysis Framework: The study applied thematic analysis following Braun and Clarke’s (2006) six-step process (See Appendix D):

- Familiarization: Each document was read thoroughly and key content highlighted.
- Generating Initial Codes: Codes were created both deductively (informed by literature and theory) and inductively (emerging from the texts).
- Searching for Themes: Similar codes were grouped into larger conceptual categories.
- Reviewing Themes: Initial themes were refined and checked across all documents.
- Defining and Naming Themes: Themes were given clear labels and supported by quotations or policy references.
- Producing the Report: Analysis was contextualized in relation to research questions and presented in Chapter IV.

Themes were directly informed by the conceptual and theoretical framework, which emphasized equity, access, participation, and learner empowerment in emergency contexts.

Analytical Categories: Based on research objectives and the guiding theoretical lenses (Social Constructivism and the Capabilities Approach), the following categories were used in coding and analysis:

- Infrastructure and Access: Availability of electricity, internet, and digital devices for learners and schools.
- Teacher Preparedness: Professional development in digital pedagogy, especially for emergency instruction.
- Inclusivity: Special focus on underserved communities, including rural areas, refugee settlements, and temporary displacement zones.
- Policy Coordination: Inter-ministerial alignment and stakeholder collaboration in implementing e-learning.
- Sustainability: Long-term planning, funding mechanisms, and monitoring strategies for education resilience.
- Emergency Response: Provisions for continuity during crises, including contingency planning and deployment of alternative delivery mechanisms.

Coding Template: To guide the analytical process, a coding matrix was developed in Excel with columns for:

- Policy document name and year
- Source/authoring body
- Relevant research question addressed
- Thematic codes assigned

- Key quotations
- Observations or contradictions noted

This matrix enabled systematic organization and comparison of findings across the dataset.

Tools for Organizing and Interpreting Results: To ensure traceability and transparency, the following tools were employed:

- Theme Tracker Sheet: Monitored theme recurrence and distribution across documents (See Appendix C).
- Quote Bank: Archived impactful policy statements or phrases to be used in analysis and discussion (See Appendix E).
- Policy-Practice Gap Matrix: Mapped official policy intentions against known implementation challenges (e.g., reported by development partners or in evaluation reports) (See Appendix F).
- SDG Alignment Chart: Assessed policy compliance with SDG 4 (inclusive and equitable education for all) (See Appendix G)

**Document Review Outcomes**

The outcomes of this document analysis include:

1. A synthesized summary of key policy provisions addressing digital learning, education continuity, and support for underserved communities in emergencies.
2. A policy gap analysis highlighting inconsistencies or absences in national strategies.
3. Recommendations for policymakers on strengthening education resilience, informed by cross-document comparisons and theoretical insights.

4. This manuscript, which consolidates the methodology and findings in a structured academic format, including citations and appendices.

These outputs will be shared with academic audiences, stakeholders in the education sector, and potentially with government agencies interested in improving Uganda's emergency education preparedness.

Ethical Considerations: This study uses only publicly available documents, eliminating risks related to participant consent or data privacy. Nevertheless, academic integrity was upheld through:

- Accurate attribution of all sources
- Careful contextualization of policy texts to avoid misinterpretation
- Respect for institutional reputations, with critiques framed constructively

The purpose is to support better policy formulation, not to blame institutions or individuals.

Limitations of the Analysis: While document analysis provides valuable insights into government priorities and planning, it has limitations:

- Implementation realities such as community-level challenges, teacher experiences, or learner perspectives cannot be fully captured without primary data collection.
- Timeliness: some documents may be outdated or not reflect the latest practices or developments.
- Accessibility: a few relevant policy drafts or internal reports may not be publicly available, potentially limiting comprehensiveness.

Nonetheless, by triangulating multiple high-level documents and using a theory-driven lens, the study presents a robust and contextually grounded analysis of Uganda's education resilience strategies.

# CHAPTER IV

# FINDINGS AND DISCUSSION

## Findings of the Document Analysis

**Table 1:**
*Summary Table of Policy Findings*

| Theme | Key Issues Identified | Representative Documents |
|---|---|---|
| Infrastructure and Digital Access | Low internet and electricity access; urban-focused e-learning initiatives; lack of scalable device distribution. | National Strategy for E-Learning (2021); Digital Uganda Vision (2019); ERP I (2018) |
| Teacher Capacity and Digital Literacy | Inadequate teacher training; limited digital pedagogy; absence of in-service and emergency-specific training. | Education Sector Strategic Plan (2020); ICT in Education Policy Draft (2017); COVID-19 Education Response Plan (2020) |
| Inclusion of Refugees and Displaced Learners | Refugees better represented than IDPs; heavy reliance on donor funding; poor provision for learners with disabilities. | ERP I (2018); UNHCR Education Strategy (2019); MoES EiE Guidelines (2017) |
| Emergency Response Mechanisms | No clear national contingency plan; limited deployment of platforms like Kolibri; little planning for risk zones. | COVID-19 Education Response Plan (2020); National Development Plan III; Sendai Framework (referenced) |

| | | |
|---|---|---|
| Policy Coordination and Alignment | Fragmented efforts among MoES, ICT Ministry, and districts; lack of implementation frameworks at the local level. | Digital Uganda Vision (2019); ICT Policy (2017); ERP II (2023) |
| Monitoring and Sustainability Mechanisms | Undefined M&E processes; vague sustainability strategies; no funding guarantees; limited local ownership of programs. | Education Sector Strategic Plan (2020); National Strategy for E-Learning (2021) |

This section presents the findings generated from a qualitative document analysis of selected national education policies, strategies, and emergency response frameworks in Uganda. The documents reviewed span from 2011 to 2024 and include plans developed by the Ministry of Education and Sports (MoES), National Planning Authority (NPA), Ministry of ICT and National Guidance, UNHCR Uganda, and other development partners. Thematic analysis of these documents revealed six major themes: infrastructure and digital access, teacher capacity and digital literacy, refugee and displaced learners' inclusion, emergency response mechanisms, policy coordination and alignment, and monitoring and sustainability mechanisms.

Infrastructure and Digital Access: Infrastructure limitations were consistently acknowledged across documents. The National Strategy for E-Learning (MoES, 2021) and Digital Uganda Vision (MoICT, 2019) recognize that inadequate internet access, poor electricity coverage, and low availability of ICT devices significantly hinder the rollout of e-learning programs. Less than 22% of households in Uganda have internet access (Bashaasha et al., 2021), and only 14% of rural households have reliable electricity (World Bank, 2022).

While the policies promote using ICT in education, few propose concrete solutions for ensuring device access in refugee settlements and remote regions. The Education Response Plan for Refugees and Host Communities (MoES, 2018) mentions distribution of solar-powered tablets in pilot initiatives but lacks a scaling strategy. Most e-learning interventions remain urban-focused, leaving rural learners behind.

Teacher Capacity and Digital Literacy: The review of Uganda's education policy documents revealed significant challenges surrounding teacher capacity and digital literacy in the context of emergency learning. Several frameworks such as the Education Sector Strategic Plan (MoES, 2020) and the ICT in Education Policy Draft (MoES, 2017) acknowledged the critical role of teachers in implementing e-learning and advocated for ICT integration into teacher training curricula. Despite these acknowledgements, most policies lacked robust implementation plans, timelines, or budgetary allocations to ensure systemic rollout.

The COVID-19 Education Response Plan (MoES, 2020) called for the rapid upskilling of teachers to deliver instruction via radio, television, and digital platforms. However, follow-up mechanisms to assess the success of this intervention were absent. Nakabugo et al. (2022) found that less than 30% of rural teachers received any training related to online instruction, and even fewer had access to tools and support for practical implementation. This gap was particularly pronounced in underserved districts where infrastructure and connectivity were limited, reducing the feasibility of digital learning even when teachers had theoretical knowledge.

Moreover, the reviewed documents did not address in-service professional development for teachers already in the workforce, a gap which further marginalizes learners in crisis contexts. Without ongoing training and mentorship in digital pedagogy, many teachers lack the confidence and competence to transition to technology-enabled teaching during disruptions.

Additionally, the reviewed policies paid little attention to building localized teacher capacity for emergency preparedness. For example, there was minimal discussion of how teachers in disaster-prone areas such as Bududa or Kasese might receive specialized training in delivering instruction during displacement or infrastructural breakdown. The absence of such provisions reflects a broader shortcoming in the conceptualization of teacher preparedness within national digital education strategies.

Inclusion of Refugees and Displaced Learners: Uganda is host to one of the largest refugee populations in Africa, with settlements like Bidibidi, Nakivale, and Kyangwali accommodating hundreds of thousands of displaced learners (UNHCR, 2023). The Education Response Plan for Refugees and Host Communities (2018-2021) and the UNHCR Uganda Refugee Education Strategy (2019) provide detailed frameworks for expanding access to education in these communities. These documents prioritize inclusive access, alternative learning programs, and the use of ICT to bridge educational gaps.

However, a closer analysis revealed that many of these initiatives are donor-driven and externally funded, raising concerns about long-term sustainability. Very few of the reviewed policies indicated plans to integrate refugee education financing into the national budget. This dependence on international partners undermines Uganda's ability to build resilient, locally managed education systems in refugee settings.

Internally displaced persons (IDPs), particularly those affected by natural disasters such as floods in Kasese and landslides in Bududa, received less attention in national strategies. Temporary learning centers were referenced in the National Education in Emergencies Guidelines (MoES, 2017), yet the documents lacked clear guidance on quality standards, teacher deployment, and instructional materials. Furthermore, there were no provisions for digital learning in these emergency shelters, despite their relevance for continued education.

The absence of long-term policy attention to IDPs signals a significant gap in national resilience planning. Uganda's education policy documents generally focus on permanent settlements or formal refugee systems, leaving those in temporary displacement vulnerable to long-term educational exclusion.

Emergency Response Mechanisms: Uganda has taken steps to formalize emergency response planning within its education sector. The COVID-19 Education Response Plan (MoES, 2020) was the most comprehensive of all the reviewed documents, outlining short-term interventions such as home study packs, educational broadcasting, and printed materials. These measures were vital in mitigating immediate disruption; however, the plan also acknowledged their limitations, particularly the lack of interactivity and learner engagement.

The Sendai Framework for Disaster Risk Reduction (UNDRR, 2015), referenced in Uganda's National Development Plan III (2020-2025), emphasizes the need to safeguard education systems during crises. Despite this, very few national education policies translated this global commitment into actionable strategies. There were no clear guidelines on how e-learning would be deployed during future emergencies such as flooding, landslides, or public health outbreaks.

For instance, while technologies like Moodle, Kolibri, and offline learning kits were mentioned in passing, their deployment plans were either non-existent or limited to pilot projects in refugee settlements. Furthermore, there was little indication of contingency planning for schools in known risk zones, which undermines Uganda's efforts toward education resilience.

Policy Coordination and Alignment: One of the most consistent themes across the policy documents was the lack of coordination among various ministries and agencies. The Digital Uganda Vision (2019), ICT in Education Policy Draft (2017), and National Strategy for E-Learning (2021) were developed with little apparent alignment or integration. Ministries such as the Ministry of Education and Sports (MoES), the Ministry of ICT, and local government entities appeared to operate in silos.

This lack of inter-ministerial collaboration is particularly problematic in emergency contexts where a unified response is essential. The implementation of digital learning platforms was often ad hoc, with little standardization across education levels or districts. For instance, Kolibri and Moodle were promoted at the national level, yet there was no document articulating how these platforms would be supported technically or pedagogically at the school level.

Additionally, district-level education offices were not explicitly included in the implementation frameworks for digital education. This exclusion is concerning given that district authorities are often the first responders during localized disasters. Strengthening coordination at both national and local levels is thus essential for effective deployment of digital learning in emergencies.

Monitoring and Sustainability Mechanisms: Although many of Uganda's education policy documents emphasized sustainability and monitoring, the specifics were often vague or absent. The Education Sector Strategic Plan (2020) includes a framework for Monitoring and Evaluation (M&E), yet only a small portion of its indicators relate directly to digital learning or emergency response.

Crucially, the reviewed policies did not define who is responsible for monitoring digital education initiatives, how feedback will be collected, or how findings will inform future programming. This lack of clarity hampers accountability and makes it difficult to assess progress over time.

Funding sustainability also remains unclear. Programs like solar-powered tablet distribution in refugee camps, while innovative, lacked provisions for maintenance, content updates, and replacement cycles. The National Strategy for E-Learning (2021) mentions public-private partnerships but does not outline how these collaborations will be formalized or funded in the long term.

Without a strong domestic financing strategy, Uganda's digital education initiatives risk remaining dependent on external donors, threatening both scalability and sustainability.

Cross-Cutting Observations: Several overarching trends emerged from the document review, revealing structural and conceptual weaknesses in Uganda's approach to inclusive digital education during emergencies:

- Equity Gaps: Despite frequent references to "inclusive education," there was a noticeable lack of targeted strategies for underserved populations especially rural learners and children from low-income households. Most policies focused on either generic ICT access or support for learners with disabilities, neglecting other forms of exclusion.

- Technology-Neutral Language: The term “ICT” was often used without specification. This vagueness makes it difficult to understand what devices, platforms, or modalities are being promoted or prioritized. Given Uganda’s bandwidth and power constraints, specificity is essential to ensure relevance and effectiveness.
- Lack of Data Systems: None of the reviewed documents proposed systems for collecting real-time data on learner participation or engagement during emergencies. This omission hinders the ability to monitor reach and effectiveness and limits the capacity for evidence-based planning.
- Urban-Rural Disparities: There was little differentiation between urban and rural deployment strategies. For example, while online platforms were promoted nationally, their feasibility in areas without electricity or reliable internet was not addressed.
- Limited Community Involvement: The role of parents, community leaders, and local organizations in supporting emergency learning was largely absent from the documents. Their exclusion ignores an important resource in both delivery and accountability.

***Summary of Key Findings***

Uganda has developed a number of forward-looking policies that acknowledge the importance of education continuity in emergencies. However, the analysis reveals a significant disconnect between policy intent and practical implementation. The findings underscore the need for:

- Concrete strategies to build digital infrastructure in rural, refugee, and displacement contexts.

- A systematic teacher training framework that goes beyond one-off workshops.
- An integrated emergency response plan that includes both traditional and digital learning modalities.
- Clear roles and responsibilities across ministries to promote policy coordination.
- Sustainable funding models and robust monitoring systems to track impact and improve accountability.

These findings set the foundation for the discussion chapter, which will further explore the implications of these gaps and propose strategies to strengthen Uganda's capacity for inclusive and resilient education delivery in the face of future crises.

**Discussion of the Findings**

The findings of this study point to both progress and persistent challenges in Uganda's education policy landscape, particularly in its approach to inclusive e-learning during emergencies. Drawing on thematic insights from key national policy documents, this discussion contextualizes those findings within broader debates on policy coherence, digital equity, and educational resilience. This section also reflects on how well the policies meet Uganda's obligations under frameworks such as SDG 4, the INEE Minimum Standards, and the Sendai Framework, and how they align with the conceptual underpinnings of Social Constructivism and the Capabilities Approach.

Policy-Implementation Gaps and the Capabilities Deficit: While Uganda has developed robust policy frameworks acknowledging the role of ICT in education (e.g., the National Strategy for E-Learning, 2021), the study found a critical gap between policy rhetoric and the lived realities of learners in rural and crisis-affected contexts. This mirrors what the Capabilities Approach emphasizes: policies should not only exist but must expand people's actual freedoms and opportunities. In this case, many learners lack the infrastructural conditions; electricity, internet, or devices to realize their right to education.

This implementation gap weakens the transformative potential of the policy environment and highlights how capabilities are undermined not just by poverty but by weak follow-through mechanisms in governance.

Fragmented Coordination: A Constructivist Concern: Another recurring theme was the lack of inter-ministerial collaboration, with policies developed in isolation by MoES, the Ministry of ICT, and others. Social Constructivism reminds us that inclusion and learning are socially constructed through context, culture, and institutional practices. Fragmentation at the policy level thus reflects misaligned institutional learning processes where policies do not "talk to each other" nor adapt to ground realities.

This also explains why promising pilots (e.g., Kolibri deployment, solar tablets) have failed to scale because they are not embedded within a unified national system.

Equity, Inclusion, and Invisible Populations: The analysis showed that refugee learners are more visible in policy documents than internally displaced persons (IDPs), despite Uganda's exposure to natural disasters. Inclusion, as defined in your conceptual framework, requires deliberate attention to the most vulnerable. Yet IDPs, learners with disabilities, and rural girls often remain unaccounted for in implementation strategies.

This exclusion contradicts both the INEE Minimum Standards and SDG 4, which emphasize leaving no one behind. It also contradicts the capabilities-based understanding of justice, where support must be differentiated to equalize outcomes, not merely access.

Sustainability and Ownership: Beyond Donor Dependency: A key limitation in Uganda's approach is the donor-dependence of many digital initiatives. Despite government-led strategies, many programs especially in refugee and emergency education are externally funded and lack sustainability mechanisms such as budget lines or national rollout plans.

This reliance undermines long-term system resilience and conflicts with Uganda's Vision 2040 and the third National Development Plan (NDP III), both of which stress domestic innovation and digital transformation.

The Silence of Teachers and Communities: While teachers are mentioned in many policies, the lack of provisions for continuous professional development in digital pedagogy is concerning. More so, teachers' voices and those of learners and communities are missing from most documents.

Social Constructivism emphasizes the co-construction of knowledge and systems, yet Uganda's education response remains top-down, with little evidence of participatory design. This affects the contextual appropriateness and uptake of e-learning initiatives, especially in hard-to-reach areas.

Toward a Coherent, Inclusive Digital Future: Despite these gaps, the study also highlights policy momentum and institutional intent. For example, the COVID-19 Education Response Plan showcased agility in deploying multimodal learning platforms. The Education Response Plan for Refugees provided a rare example of multi-sectoral coordination, albeit donor-led.

To move from intent to impact, Uganda must now pivot toward:

- Integrated frameworks that unify ICT and education strategies.
- Domestic resource allocation for education technology and infrastructure.

- Participatory policy development, especially in regions vulnerable to displacement.

This discussion highlights that while Uganda’s education policy environment is evolving in response to emergencies, its full potential is constrained by fragmentation, inequity, and limited local ownership. Applying Social Constructivism and the Capabilities Approach reveals how systemic inclusion is not just a policy matter but a reflection of institutional values and priorities. For Uganda to build an inclusive, resilient, and context-sensitive e-learning ecosystem, future reforms must close the implementation gap and invest in people, not just platforms.

# CHAPTER V

# CONCLUSIONS

**Summary of Findings and Broad Conclusions**

This study set out to examine the state of educational continuity during emergencies and crises in Uganda, focusing specifically on how national education policy documents have addressed e-learning as a strategic response. Using a document analysis methodology, the study reviewed key policy texts, strategic plans, and frameworks from 2011 to 2024, including Uganda's COVID-19 Education Response Plan, the Education Response Plan for Refugees and Host Communities, the National E-Learning Strategy, and the MoES Digital Agenda.

The findings of the study reveal that Uganda has made important strides in policy formulation concerning education in emergencies. Policies such as the Education in Emergencies Guidelines and the Digital Agenda Strategy reflect an increasing awareness of the need for technology-driven solutions to ensure learning continuity. Additionally, Uganda's integration of refugee learners into national education plans demonstrates a commendable commitment to inclusive education.

However, several recurring challenges emerged across the reviewed documents. A major concern is the persistent digital divide, particularly affecting learners in rural districts, refugee settlements, and temporary displacement camps. Many of these communities continue to lack electricity, internet access, and affordable devices, factors which make the transition to e-learning during emergencies difficult if not impossible. While policy frameworks often assume the existence of these basic utilities, they seldom provide detailed implementation plans or financing strategies to close the gap.

Another significant finding is the limited attention given to internally displaced persons (IDPs) compared to refugees. Although Uganda hosts over 1.6 million refugees and has policy frameworks designed to support them, there are no equivalent national strategies that explicitly support children displaced by natural disasters such as landslides in Bududa or floods in Kasese. As a result, learners in temporary settlements often fall through policy cracks, receiving little to no support during times of crisis.

Furthermore, the study found that teacher preparedness for digital learning remains insufficient. While many policies acknowledge the importance of equipping teachers with digital skills, few offer concrete action plans for implementation at scale. The result is a gap between policy intent and classroom reality, particularly in underserved areas.

The analysis also exposed issues of sustainability and policy coherence**.** Many of the strategies implemented during the COVID-19 pandemic, such as digital content development and online platforms, were donor-driven and lacked long-term integration plans. Moreover, education policies and ICT strategies are often developed in silos, leading to fragmented efforts and limited coordination across government ministries.

Despite these challenges, the study concludes that Uganda has a solid foundation on which to build. The presence of policy frameworks, the integration of refugees into national systems, and the willingness to explore digital learning options are all indicators of readiness. However, moving forward, a system-wide and proactive approach is necessary. This includes embedding e-learning into long-term education strategies, prioritizing underserved communities, budgeting for sustainability, and improving inter-agency coordination.

In summary, Uganda's education system exhibits a strong policy orientation toward resilience in emergencies. Yet, to truly achieve sustainable, inclusive, and crisis-ready education systems, the country must shift from reactive strategies to forward-looking frameworks that integrate technology, infrastructure, training, and community engagement. These broad conclusions lay the groundwork for the next sections, where limitations and actionable recommendations are discussed.

## Limitations of the Study

While this study provides valuable insights into Uganda's policy preparedness for sustaining education during emergencies, it is important to acknowledge several limitations that may have influenced the depth and scope of the findings.

First, the research design was limited to qualitative document analysis. No primary data were collected through fieldwork, interviews, or surveys. This means that the study relied entirely on the availability, quality, and accessibility of policy documents, strategy frameworks, and official reports. In some cases, key implementation documents were not publicly available, possibly excluding essential operational details or recent updates that could have influenced the analysis.

Second, although the study aimed for comprehensive coverage of Uganda's education policy landscape from 2011 to 2024, the scope of reviewed documents was constrained by language, publication access, and document recency. Some regional or district-level initiatives particularly those led by NGOs, development agencies, or local governments may not have been captured if they were unpublished or not formally integrated into national policy records.

Third, the study focused primarily on Uganda's national education context and did not undertake comparative analysis with other countries. While references to global and regional literature were made in the literature review, a comparative approach might have enriched the findings and offered additional insights into best practices and models that could inform Uganda's strategy.

Fourth, the study centered on e-learning as a primary intervention for education continuity, which may have overlooked the potential of other blended or low-tech modalities such as print-based home learning packages, community learning hubs, and mobile libraries especially relevant in low-connectivity areas. Future research could explore the intersection of these modalities with digital strategies.

Lastly, while efforts were made to ensure objective interpretation, researcher subjectivity may have influenced how policy intentions and gaps were identified and categorized. The analysis was guided by thematic frameworks, but some interpretation was inevitable, especially in evaluating the alignment between policy narratives and practical feasibility.

In summary, these limitations do not undermine the value of the study but rather highlight opportunities for further research and underscore the need for continued engagement with practitioners, policymakers, and communities to bridge knowledge gaps and build more inclusive, resilient education systems.

**Recommendations**

Based on the findings of this study, several actionable recommendations are proposed to strengthen the resilience and inclusiveness of Uganda's education system, particularly in crisis and emergency contexts:

- Embed E-Learning in Long-Term Education Planning: E-learning should not be treated as an emergency-only solution. Instead, it must be fully integrated into Uganda's national education strategies and frameworks, with clear implementation pathways, defined responsibilities, and budget allocations. This includes long-term investments in digital content development, platform maintenance, and capacity building.
- Prioritize Infrastructure in Underserved and Crisis-Prone Areas: The government should work closely with stakeholders to expand electricity, internet connectivity, and access to learning devices in rural districts, refugee settlements, and areas prone to floods and landslides. Consideration should also be given to low-tech solutions such as solar-powered routers and offline digital learning tools for communities without stable connectivity.
- Develop a National Strategy for Internally Displaced Learners: While refugee education is well-covered in existing policies, there is a pressing need for a dedicated framework for internally displaced persons (IDPs), including learners affected by natural disasters. This should include provisions for mobile classrooms, emergency teaching kits, and remote learning solutions.
- Invest in Teacher Digital Capacity: Widespread and equitable teacher training in digital pedagogy, content creation, and online learner engagement is essential. This training should be embedded into pre-service education and continuously offered through professional development programs, especially for educators in hard-to-reach areas.
- Strengthen Policy Coordination and Accountability: Inter-ministerial collaboration between the Ministry of Education, Ministry of ICT, Office of the

Prime Minister, and local governments should be formalized. Joint task forces and harmonized frameworks can help avoid duplication, align resources, and streamline responses during crises.

- Establish Sustainable Funding Mechanisms: The government should reduce reliance on donor-funded digital initiatives by establishing dedicated funding for e-learning infrastructure, maintenance, and innovation. Public-private partnerships and cost-sharing models can be explored to support this effort.
- Engage Communities in Policy Development: Finally, community members including learners, teachers, and parents should be involved in the design, implementation, and evaluation of emergency education strategies. Participatory approaches will ensure that interventions are contextually relevant, accepted, and more likely to succeed.

These recommendations aim to guide policymakers, education leaders, and stakeholders in building a robust, inclusive, and future-ready education system for all Ugandan learners, especially the most vulnerable.

# APPENDIX A

# DOCUMENT REVIEW LOG

**Table 2**
*All Policy Documents Reviewed*

| **Title** | **Author / Institution** | **Year** | **Scope** | **Key themes** | **Notes on relevance to the research questions** |
|---|---|---|---|---|---|
| Education Response Plan for Refugees and Host Communities (2018-2021) | MoES | 2018 | Refugee | Inclusion, Infrastructure, Emergency Response | Addresses refugee education access and digital learning pilots. |
| National Strategy for E-Learning | MoES | 2021 | National/ Digital | Digital Infrastructure, Teacher Training, Equity | Primary reference for digital learning strategies. |
| COVID-19 Education Response Plan | MoES | 2020 | National | Continuity, Remote Learning, Access | Emergency response to school closures; multimodal learning. |

| | | | | | |
|---|---|---|---|---|---|
| UNHCR Uganda Refugee Education Strategy | UNHCR | 2019 | Refugee | Equity, ICT Integration, Policy Gaps | Focus on refugee inclusion and support services. |
| Digital Uganda Vision | MoICT | 2019 | National/ Digital | ICT Infrastructure, Access, Innovation | Broader digital agenda with implications for education. |

# APPENDIX B

# DOCUMENT SELECTION CRITERIA

**Table 3**

*Document Selection Criteria*

| **Criteria Type** | **Criteria Description** |
|---|---|
| Inclusion | Officially endorsed or published by a government agency or development partner. |
| Inclusion | National coverage or relevance to vulnerable learners (refugees, rural learners, displaced populations). |
| Inclusion | Specifically mentions e-learning, emergency response, digital infrastructure, or inclusive education. |
| Inclusion | Published between 2011 and 2024. |
| Inclusion | Publicly accessible through government portals, international repositories, or education sector working groups. |
| Exclusion | Focused solely on technical ICT matters without reference to education. |
| Exclusion | Outdated or superseded by newer versions. |
| Exclusion | Lacked credible authorship or were informal working drafts. |

# APPENDIX C

# THEMATIC CODING TEMPLATE

**Table 4**
*Thematic Coding Template*

| **Policy name** | **Code/theme** | **Quote or excerpt** | **Interpretation/notes** |
|---|---|---|---|
| National Strategy for E-Learning (2021) | Infrastructure and Access | Limited electricity and internet access in rural areas continue to hinder e-learning implementation. | Highlights infrastructural barriers; relevant for evaluating equity in digital access. |
| Education Response Plan for Refugees (2018-2021) | Inclusivity | Equitable access for both refugee and host community learners is prioritized | Focuses on inclusion in emergency education, especially for marginalized groups. |
| COVID-19 Education Response Plan (2020) | Teacher Preparedness | Rapid upskilling of teachers will be prioritized through distance-based training. | Addresses teacher readiness, though follow-up mechanisms were absent. |
| Digital Uganda Vision (2019) | Policy Coordination | ICT development must align with sectoral goals including education. | Indicates inter-ministerial alignment is acknowledged but not operationalized. |

| | | | |
|---|---|---|---|
| UNHCR Refugee Education Strategy (2019) | Sustainability | Projects must transition from donor support to government integration. | Calls for domestic ownership; important for long-term resilience. |

# APPENDIX D

# BRAUN AND CLARKE'S THEMATIC ANALYSIS STEPS

Familiarization with the Data

All selected policy documents were read thoroughly at least twice.

Example: The National Strategy for E-Learning (2021) was highlighted to identify repeated mentions of infrastructure challenges and access gaps in rural areas.

Generating Initial Codes

Codes were developed both deductively (from conceptual frameworks) and inductively (emerging from texts). Examples of Initial Codes:

- Digital Infrastructure gap
- Teacher ICT capacity
- Donor-dependence
- Inclusion of refugee learners
- Searching for Themes

Codes were clustered into potential overarching themes.

Emerging Themes:

- Infrastructure and Access
- Teacher Preparedness
- Inclusivity and Marginalized Groups
- Reviewing Themes

Themes were reviewed across all documents for consistency and coherence.

Example: The theme Inclusivity was confirmed by cross-referencing both the Education

Response Plan for Refugees (2018–2021) and the UNHCR Refugee Education Strategy (2019).

- Defining and Naming Themes

Each theme was clearly defined and refined for clarity.

Final Theme Examples:

- Policy Coordination and Alignment
- Monitoring and Sustainability Mechanisms
- Emergency Response Gaps
- Producing the Report

The final thematic structure was used to write up the findings in Chapter IV of the study.

Integration Example: Direct quotations from the MoES COVID-19 Response Plan (2020) were used to support the analysis of emergency teacher training efforts.

# APPENDIX E

# QUOTE BANK

**Table 5**
*Quote Bank*

| Policy Document | Quotation | Theme/Insight |
|---|---|---|
| National Strategy for E-Learning (2021) | Limited electricity and internet access in rural areas continue to hinder e-learning implementation. | Highlights infrastructure as a major barrier to equitable access. |
| Education Response Plan for Refugees (2018-2021) | Equitable access for both refugee and host community learners is prioritized. | Emphasizes commitment to inclusion across different learner populations. |
| COVID-19 Education Response Plan (2020) | Home-study packs and broadcasting through radio and TV will be used to reach learners during school closures. | Illustrates Uganda's multimodal emergency education response. |
| Digital Uganda Vision (2019) | ICT development must align with sectoral goals including education. | Reinforces the importance of cross-sectoral policy alignment. |
| UNHCR Uganda Refugee Education Strategy (2019) | Projects must transition from donor support to government integration. | Warns against long-term reliance on donor funding for education resilience. |

# APPENDIX F

# POLICY-PRACTICE GAP MATRIX. POLICY PROVISION VS ON GROUND GAP/CHALLENGE

**Table 6**
*Policy-Practice Gap Matrix*

| Policy Provision | On-Ground Challenge or Gap |
|---|---|
| The National Strategy for E-Learning (2021) promotes equitable access to digital education across all regions. | Rural areas continue to face severe connectivity issues, with less than 14% having reliable electricity. |
| COVID-19 Education Response Plan (2020) includes rapid upskilling of teachers in digital delivery. | Less than 30% of rural teachers received any online teaching training, with limited access to devices or follow-up support. |
| Education Response Plan (2018-2021) supports integration of refugee learners into national systems. | Refugee education remains dependent on donor funding, with limited government-led sustainability mechanisms. |
| Digital Uganda Vision (2019) calls for ICT integration across all sectors including education. | Lack of coordination between MoES and Ministry of ICT results in fragmented implementation and policy silos. |
| National Education in Emergencies Guidelines highlight contingency planning for disaster-prone areas. | No clear digital learning plans or resources have been deployed for displaced learners in Bududa and Kasese. |

# APPENDIX G

# SDG 4 AND INEE STANDARDS ALIGNMENT CHART

**Table 7**

*A Matrix Showing how Each Ugandan Policy Aligns (or doesn't) With SDG 4 Targets and INEE Minimum Standards for Education in Emergencies*

| Policy Document | Alignment with SDG 4 | Alignment with INEE Standards |
|---|---|---|
| Education Response Plan (2018-2021) | Partially aligned promotes inclusive access for refugees, but limited on disabilities and long-term sustainability. | Aligned in principle mentions access and participation, but lacks operational clarity and monitoring mechanisms. |
| National Strategy for E-Learning (2021) | Strong alignment focuses on equitable digital access and teacher capacity. | Partial: Some reference to learner needs, but limited detail on community participation and contingency planning. |
| COVID-19 Education Response Plan (2020) | Moderate prioritizes learning continuity, but solutions were not inclusive for all marginalized groups. | Partial: Addresses continuity and curriculum delivery, but weak on inclusivity and psychosocial support. |
| UNHCR Refugee Education Strategy (2019) | Moderate focuses on refugee inclusion, but implementation relies on external funding. | Strong: Emphasizes access, equity, and safety in refugee learning contexts. |

| | | |
|---|---|---|
| Digital Uganda Vision (2019) | Indirect supports ICT in education broadly, but lacks specific education equity goals. | Weak: Does not explicitly reference education in emergencies or related safeguards. |

# APPENDIX H

# SAMPLE CODED DOCUMENT PAGES

**SECTION 1: STANDARDS AND GUIDELINES FOR MANAGEMENT AND GOVERNANCE**

**1.0 Introduction**

There is needfor strategic management and governance in the deployment of e-Learning in the education sector in Uganda. As a standard, all institutions implementing e-Learning should havea dedicated e-Learning Unit with the sole responsibility of deploying and managing the deployment of the e-Learning as well as putting in place its governance/management structure. The unit should have a suitable organizational structure and governance/management mechanism to provide quality e-Learning services to the teachers and learners in the institution. The emphasis must also be to ensure that the deployment, usage and services provided by all educational institutions meet the requirement of the National Digital Agenda and ICT in Education Policy.

**Figure 1**

*Introduction to the Standards Highlights the Need for a Dedicated E-Learning Unit Responsible for Governance, Deployment, and Management of Digital Education (Moes, 2023a, Section 1.0).*

**1.1.4 Plan**

**The section is mainly applicable to HEIs.**

a) The unit MUST develop comprehensive e-Learning plans to achieve the stated vision and outcomes that are in line with Digital Agenda.
b) Theplan MUST be well coordinated with all units/departments/faculties/colleges within the institution to ensure that all the teaching staff and students are fully engaged in e-Learning practices.
c) The institutions strategic and operational plans MUST recognize and support the use of technologies to facilitate learning and teaching.
d) Specific plans relating to the use of e-Learning SHOULD be aligned with the Education sector' strategic and operational plans.
e) Planning for e-Learning SHOULD be aligned with the budgeting process and financial allocation disbursed by the Education sector vote.
f) The planning of e-leaning SHOULD cover all aspects and stakeholder needs and requirements.

**Figure 2*:***

*Institutions are Required to Develop Comprehensive E-Learning Plans Aligned With Uganda's Digital Agenda (Moes, 2023a, Section 1.1.4(A)).*

**1.1.6 Quality**

**The section is mainly applicable to HEIs.**

a) Institutions SHOULD ensure that the processes for quality assuranceare in place and integrated within the administrative and operational system of e-Learning.

b) Where appropriate, institutions SHOULD consider using resourcemechanism in the process of planning and quality improvement.

c) Coordination for the integration of quality mechanism SHOULDoccur across all key functional areas within the institution.

d) Institutions SHOULD measure the relevant key performance indicators(KPIs) and report to MoES and all key stakeholders.

**Figure 3**

*The Standards Recommend Integration of Quality Assurance Mechanisms into E-Learning Systems (Moes, 2023a, Section 1.1.6(A)).*

**Table 1: Summary of Education Response Plan I review**

| | |
|---|---|
| Achievements | <u>Improved equitable access to inclusive relevant learning opportunities</u><br>• The gross enrolment rate (GER) for refugees improved for all levels, while a decline was recorded for host community for primary and secondary level.<br>• In FY 2020/21, the Government grant aided 51 primary schools, bringing the number of government schools to 68 in the refugee-hosting districts.<br>• Eight Early Childhood Development (ECD) centres, ten primary schools and three secondary schools were newly established reducing the distances to school.<br>• 1,028 classrooms and 4,393 latrine stances were established for primary, secondary and accelerated education programmes (AEP), improving the Pupil Classroom Ratio from 154:1 to 135:1 for primary and from 143:1 to 87:1 for secondary between 2017 and 2021.<br>• Continued learning was supported during the COVID-19 period through self-study materials, radio, television lessons and the use of information and communications technology (ICT).<br>• AEP and double-shifting innovations were implemented, which are estimated to have increased access for 14,915 primary learners. |

**Figure 4**

*Highlights Achievements in Digital Learning Continuity During COVID-19 Using ICT, Alongside Classroom Expansion For AEP And Secondary Education (Moes, 2021, Table 1).*

| | |
|---|---|
| Challenges | <u>Improved equitable access to inclusive relevant learning opportunities</u><br>• GER of girls both in primary (84.5 per cent) and secondary (7.5 per cent) are still lower than the overall GER of refugees at 88.5 per cent and 12 per cent respectively.<br>• Only 2 per cent of learners with disability enrolled in school (global average: 10 per cent).<br>• Little or no improvement in secondary GER between 2017 and 2021 (from 11.3 per cent to 12.1 per cent for refugees and from 17.9 per cent to 9.1 per cent for host communities); this was attributed to the limited number of secondary schools, high school fees and societal challenges leading to early marriages and teenage pregnancies.<br>• Low retention in primary schools and limited transition to secondary and post-secondary education.<br>• Gaps in the number of school facilities meeting the government standard ratio, particularly in relation to classrooms, latrine stances, furniture and learning materials.<br>• Existing school facilities not accessible to children with disabilities (only 2 per cent of all primary and secondary schools are inclusive to all learners). |

**Figure 5**

*Presents Ongoing Challenges Such as Low Enrolment of Girls and Children with Disabilities, and Limited Improvements in Secondary GER for Refugees (Moes, 2021, Table 1).*

| | |
|---|---|
| **Lessons learned** | • More schools required, particularly at secondary level, to align with the policy of the Government of Uganda of having at least one secondary school in all sub-counties.<br>• Enhanced support required for transitioning to secondary/vocational training, to cater to the large number of learners who complete primary education.<br>• New innovations needed, such as rotations, double-shifting, ICT as pedagogical tool, blended learning and learning through play to improve access.<br>• Learning environment requires improvement through the provision of more infrastructure, teachers, materials, learning opportunities and psychosocial support.<br>• Awareness-raising and mainstreaming the COVID-19 response and the reintegration of dropouts are important measures to improve retention, completion and enrolment.<br>• Affirmative actions and follow-ups needed for girls and learners with disabilities: tracking dropouts, proving retention programmes and scholarships, enhancing community sensitization and awareness-raising programmes, developing inclusive curriculums and improving school infrastructure.<br>• Improved coordination by all stakeholders leads to improved efficiency in education service delivery and increased support supervision.<br>• Provision of vocational skills through formal and non-formal training and retooling increases employment opportunities.<br>• Early childhood care and education, post-secondary training, skilling and co-curricular activities are necessary to achieve holistic education in ERP II.<br>• Science, technology, engineering and mathematics/Innovation (STEM)/(STEI) and ICT in education can be enhanced through teacher development, implementation of lower-secondary curriculum, construction of science and ICT laboratories, installation of power and provision of libraries. |

**Figure 6**

*Lessons Learned Emphasize the Need for Inclusive Actions especially for Girls and Learners with Disabilitiesand Investments in School Infrastructure (Moes, 2021, Table 1).*

In Uganda there are over 15 million learners enrolled in education system. The bulk of whom are enrolled in day schools while the others are in boarding schools where

[2] *Including Philippines, Germany, USA, UK among others*
[3] *Mitigating the social impacts of the coronavirus: Continuity of Learning and Safety (UNICEF March 2020)*
[4] *UNESCO Internet resource (2020)*

*5*

many facilities are shared and therefore learners are in constant contact with each other, their teachers and other visitors on a daily basis. Approximately 600,000 more children are attending schools in the refugee settlement. Some of the settlements are located in high risk towns bordering countries that have reported confirmed cases of COVID-19. According to health professionals, children are considered as vector

**Figure 7**

*Describes the Vulnerability of Learners in Shared, High-Contact School Settings, with Emphasis on Refugee Settlements (Moes, 2020, P. 5).*

**1.0 BACKGROUND**

Uganda Government Vision 2040 acknowledges the potential of the ICT to accelerate development, create jobs and increase productivity. The Vision calls for a comprehensive skills development plan (in addition to investment in ICT infrastructure and innovation). In this regard therefore, the Ministry of Education and Sports (MoES) has prioritized the adoption and integration of ICT in teaching, learning and management of education and sports systems in a bid to achieve efficient and effective service delivery. To facilitate the above, the Ministry of Education and Sports has developed a 5-year Digital Agenda Strategy in Education and Sports greatly informed by stakeholder consultations in Uganda. Digital Education Standards and Guidelines (DESG) have been developed as a guide to implement the Digital Agenda in education sector. The document presents six standards and guidelines; Management and Governance, ICT infrastructure and Systems, Pedagogy and Andragogy, Content Development, Professional Development and Research, Development and Innovation, System Adoption and diffusion. The guidelines provide additional advice and support for policies, procedures to deliver efficient and effective digital education targeting a wide variety of audience.

**Figure 8**

*Background Section Explains Uganda's Digital Agenda and Outlines the Six Digital Education Standards being Implemented Nationally (Moes, 2023b, Section 1.0).*

**SECTION 1: STANDARDS AND GUIDELINES FOR MANAGEMENT AND GOVERNANCE**

**1.0 Introduction**

There is need for strategic management and governance in the deployment of e-Learning in the education sector in Uganda. As a standard, all institutions implementing e-Learning should have a dedicated e-Learning Unit with the sole responsibility of deploying and managing the deployment of the e-Learning as well as putting in place its governance/management structure. The unit should have a suitable organizational structure and governance/management mechanism to provide quality e-Learning services to the teachers and learners in the institution. The emphasis must also be to ensure that the deployment, usage and services provided by all educational institutions meet the requirement of the National Digital Agenda and ICT in Education Policy.

**Figure 91**

*Establishes Strategic Management Requirements for Institutions Implementing E-Learning, Including a Dedicated Unit (Moes, 2023b, Section 1.0).*

**2.2 ICT Infrastructure and Complementary System**

**2.2.1 Budgeting**

a) Sufficient funding MUST be made available for the procurement of any equipment and software to support e-Learning.

b) Institutions SHOULD make sure that evaluation processes are in place to justify the required annual budget on the ICT infrastructure and complementary systems (such as power, computer labs, studios) with regard to e-Learning requirement.

**Figure 2**

*Emphasizes Budgeting for Procurement Of Equipment and Software to Support E-Learning Infrastructure (Moes, 2023b, Section 2.2.1(A)).*

**2.2.3 Facilities**

a) Institutions SHOULD provide facilities for video conferencing and web meeting for teaching and learning purposes.

b) Institutions SHOULD Plan for complementary facilities such as power and computer labs that enable effective digital education

**Figure 3**

*Institutions are Advised to Provide Video Conferencing and Web Meeting Facilities to Enhance Teaching and Learning Delivery (Moes, 2023b, Section 2.2.3(A)).*

**5.1 Institutions Plans for e-Learning Training**

Institutions MUST strategically plan for e-Learning training.

5.1.1 A clear and structured annual strategic training plan based on institutions' needs and current developments MUST be formulated and documented.

a) Training plan MUST include components to enhance (1) awareness, (2) adoption of e-Learning and (3) instilling culture of e-Learning in the institution.

b) A clear process that includes all the above three components MUST be in place.

5.1.2 Planning of training on e-Learning MUST include both staff and students.

**Figure 4**

*Strategic Planning for E-Learning Training is Required, with Inclusive Plans for both Staff and Students (Moes, 2023b, Section 5.1).*

**5.2 Training Facility**

e-Learning instructors and content developers MUST have access to training facility.

5.2.1 A centre or unit MUST be established in the institution to manage training for the e-Learning instructor.

5.2.2 A dedicated e-Learning training lab MUST be provided for e-Learning training.

5.2.3 A dedicated content development lab /studio MUST be provided for e-content development training.

5.2.4 Relevant tools and software MUST be made available to content developers.

**Figure 5**

*A Dedicated Training Unit Must be Established within Institutions to Support E-Learning Instructors (Moes, 2023b, Section 5.2.1).*

# APPENDIX I

# ETHICS AND INTEGRITY STATEMENT

This study adheres to high standards of academic ethics and professional integrity throughout all phases of the research process. As a qualitative, document-based inquiry focused on education policy in Uganda, the following ethical safeguards were implemented:

Use of Publicly Available Documents: All policy documents, strategies, and frameworks analyzed in this study were publicly accessible through official sources such as:

- The Ministry of Education and Sports (MoES) of Uganda
- UNHCR, UNESCO, and the World Bank repositories
- Recognized portals like Planipolis and ReliefWeb

No confidential, private, or unpublished materials were used.

Citation and Academic Integrity: Every document and secondary source referenced in the analysis has been:

- Appropriately cited using APA 7th edition format
- Listed in the comprehensive reference section
- Contextually acknowledged when quotations or paraphrased content were used

This ensures transparency, reproducibility, and acknowledgment of intellectual property.

Respectful and Constructive Critique: The tone and approach of the analysis were intentionally designed to:

- Offer evidence-based critiques of gaps or weaknesses

- Avoid accusatory or politically biased language
- Acknowledge positive progress and policy intent alongside limitations

The goal of this research is not to criticize institutions but to support more inclusive and effective policy development for the benefit of marginalized lesarners in crisis settings.

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